



## Buchbesprechungen

EISENBERG, J. F.; REDFORD, K. H.: **Mammals of the Neotropics. Vol. 3: The Central Neotropics.** Ecuador, Peru, Bolivia, Brazil. Chicago, London: University Chicago Press 1999. 620 pp., 140 line drawings, 19 colour plates, num. tables. Cloth-only US \$ 80.00. ISBN: 0-226-19541-4.

Following vol. 1 from 1989 written by J. F. EISENBERG (see review Z. Säugetierkunde 56, 1991, 128) and vol. 2 from 1992 written by K. H. REDFORD and J. E. EISENBERG (see review Z. Säugetierkunde 58, 1993, 199–200) this is the third volume on the mammals of the Neotropics dealing with the species of Ecuador, Peru, Bolivia, and Brazil. Thus, concerning the distribution of mammals, the gap in knowledge is now filled also for this median belt region of South America. Following an introduction with general remarks, some concerning the organization of the book, how to use the book, how data for compilations were obtained, and on the geography of the regions, 21 chapters are divided into three parts. Part 1 deals with mammalian fauna in the Plio-Pleistocene of Brazil and offers 3 special chapters written by additional authors (S. D. WEBB; A. RANCY, C. CARTELLE). These give insight into isolation and interchanges of mammalian forms, fossil mammals of the Amazon region and Pleistocene environment, and Pleistocene mammals of the Cerrado and Caatinga of Brazil.

Part 2 is the main part, exceeding nearly 475 pages with the presentation of the contemporary mammalian fauna and the description of genera and species. This follows a general scheme comparable with vols. 1 and 2. 13 chapters deal with New World marsupials (41 pages), and the eutherian orders: Xenarthra (23 pp.), Insectivora (4 pp.), Chiroptera (113 pp.), Primates (49 pp.), Carnivora (Fissipedia) (33 pp.), Carnivora (Pinnipedia) (6 pp.), Cetacea (6 pp.), Sirenia (3 pp.), Perissodactyla (5 pp.), Artiodactyla (24 pp.), Rodentia (162 pp.), Lagomorpha (3 pp.). Each of these chapters starts with a characterization of the order concerning diagnosis, distribution, natural history (including many distinct biological peculiarities), and classification. In the following, the accompanying families and species are dealt with in the same manner. The occurrence of nearly all the species is documented by generalized distribution maps over the region. Dot markings indicate localisation of reports on the maps and likewise the corresponding literature in the reference list. Additionally, many skull drawings from the left side are given as well as drawings of total animals and further anatomical and morphological characteristics. Occasionally, data on body measurements are summarized, keys for species determination are offered and cladograms on the relationship of families or other taxa within the larger orders. There are also nicely prepared colour plates made by FIONA A. REID, very useful to give an information on the external appearance of some internationally poorly known endemic species. The text is very informative and in most cases clearly states uncertainties or contrary opinions of specialists. Further, it is not only a summary of cited literature but there are also many personal observations of the authors themselves mentioned and personal communications are reported reflecting special views of scientists familiar with certain species (e.g. the fact that WETZEL until his death still was convinced of the existence of a third *Choloepus* species in addition to *C. didactylus* and *C. hoffmanni* in the upper Amazon region although not yet recorded, p. 97, etc.). Of all the chapters in part 2, that on rodents is, of course, the most voluminous one and, as the authors are well aware, most probably also bears several uncertainties evaluated from today. As is commonly known for South America the knowledge of rodent species and their distribution has grown rapidly and increasingly in the last few years and already several new species have been described since the publication of this book and certainly additional ones will be in the future. At least, this is partly documented in the last vols. of this journal. However, the listed and described species give an impressive overview on the adaptive radiation in the biology of rodents.

Part 3 is devoted to five special issues on the biogeography of land mammal written by the authors or guest authors, e.g. on the Galapagos and other South American islands, on biodiversity reconsidered (J. F. EISENBERG), on macrogeography of Brazilian mammals (G. A. B. DA FONSECA; G. HERRMANN; Y. L. R. LEITE), on the structure on nonvolant mammal communities in different Amazonian forest types (C. A. PERES), and on the contemporary fauna of South America.

In general, concerning the total volume, lists of references are separately attached to each chapter

instead of a summarising list at the end of the book. This allows rapid orientation and information but very often is connected with repetitions of identical citations over several chapters. It also seems noteworthy that, rather uncommon for US American scientists, a great number of original studies in Spanish, German, and French were considered not only for citation but also in their contents. In this connection, very regrettably, rather one-sided comments are made concerning the domesticated tylopo-ods reflecting some modern (but not necessarily convincing) opinions, although much literature exists in German on this topic. Almost no indication is given on the rather early domestication of *Cavia aperea* during pre-Columbian times or the later occurring farm breeding of endemic *Chinchilla* or *Myocastor* and the biological consequences of this influence. In cases where wild ancestors and their domestic relatives are mentioned this was done in binary nomenclature indicating different species but no new species originated due to domestication. Inconsistencies also occur concerning non-endemic species introduced by man which might have had severe influence on native habitats. Some are dealt with (*Mus*, *Rattus*) in species description, others (e.g. *Sus*, *Dama*, *Lepus*) are not. In this sense, specialists may find some further queries in detail. There were, however, two general problems the authors of this volume were confronted with. Firstly, a great number of species, if not most of them, has a distribution much larger than the characterized central region and were already treated in vols. 1 and 2. In these cases, the accounts are repeated here verbatim, enlarged with new insights or in an abbreviated style. Thus, in special cases this volume is best used in conjunction with the preceding two.

Secondly, concerning taxonomy there are inconsistencies, since vols. 1 and 2 relied on HONACKI et al. (1982) while in vol. 3 the authors follow the modern treatise of WILSON and REEDER (1993). Although this was done for reasons of modernisation, some readers might be confused. Therefore, an appendix is added where comparisons are made for key species from vols. 1 and 2 with those of vol. 3.

The above mentioned criticisms are, however, only minor in nature and not heavily with regard to the comprehensive work of vol. 3 and the total three volume set. This is a very informative and modern compilation, long awaited, and very useful for mammalogists in general and those especially interested in the South American fauna.

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RIDGWAY, S. H.; HARRISON, R.: **Handbook of Marine Mammals, Vol. 6, The Second Book of Dolphins and the Porpoises**. San Diego: Academic Press (1999). Hardcover, 486 pp., numerous illustrations and tables. £ 69,95. ISBN 0-12-588506-7.

Many mammalogist will be pleased to note that all volumes of the Handbook of Marine Mammals are now available. This is the sixth and last tome of this well established and useful publication. 17 odontocete species – amongst them such well known ones as the bottlenose dolphin (*Tursiops truncatus*), the killer whale (*Orcinus orca*) and the harbour porpoise (*Phocoena phocoena*) – are presented in separate chapters by 28 authors.

As in the previous books of this series each species is described according to a standardised format: First taxonomy, evolution and common names of genus and species are characterised, the geographical distribution, external characteristics and internal anatomy are described, followed by an account of data on life history and population dynamics as well as on abundance in the habitat. Different aspects of behaviour, in some cases presented in remarkable detail, are described and characterised. An account of parasites and diseases follows, with remarks on live maintenance of captive individuals are offered. A final section deals with human effects on the respective species, such as, fisheries, pollution or habitat encroachment. Each chapter is concluded by a detailed list of references, which in some cases considers literature published in the '90s.

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